

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
10 May 2002 (10.05.2002)

PCT

(10) International Publication Number  
**WO 02/37333 A2**

(51) International Patent Classification<sup>7</sup>: **G06F 17/30**

(21) International Application Number: **PCT/US01/31413**

(22) International Filing Date: 10 October 2001 (10.10.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
09/706,396 3 November 2000 (03.11.2000) US

(71) Applicant (for all designated States except US): **TELEFONAKTIEBOLAGET LM ERICSSON [SE/SE]**; Telefonplan, S-126 25 Stockholm (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **JAI, Anuj [IN/US]**; 3920 Marcom Street, Apt. D, Raleigh, NC 27606 (US).

(74) Agents: **BENNETT, David, E. et al.**; Coats & Bennett, PLLC, P.O. Box 5, Raleigh, NC 27602 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

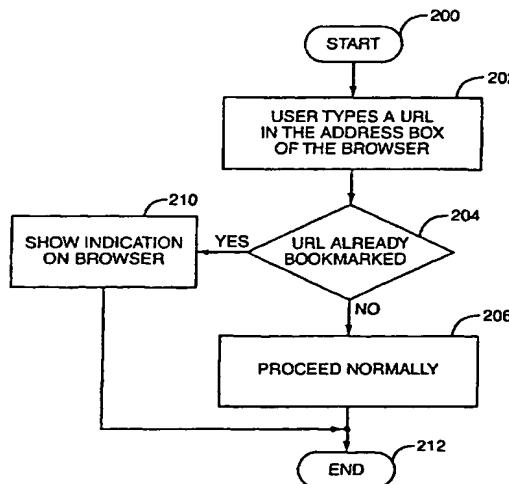
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND SYSTEM OF LEARNING ABOUT BOOKMARKS AND THEIR CONTEXT



(57) Abstract: A browser that contains features relating to bookmarks. Such features may be user programmable. The browser provides an indicator if a URL in the address box is contained in the bookmark list. The browser provides an indicator if a hyperlink on a displayed web site is contained in the bookmark list. The browser searches hyperlinks on a displayed web site and store the web site address associated with a bookmark if the hyperlink is contained in the bookmark list. The browser searches bookmark and associates other web sites to bookmarks if such other web sites reference the bookmark. The browser compares any new URL to be accessed to any other URLs to determine if such new URL is already being accessed by other browsers.

WO 02/37333 A2

**METHOD AND SYSTEM OF LEARNING ABOUT BOOKMARKS  
AND THEIR CONTEXT**

5

**BACKGROUND OF THE INVENTION**

The present invention is directed to a system and method of teaching a user about a browser. Particularly, the present invention includes a method and system of reinforcing the existence of previously established bookmarks and providing the user with the context of the established bookmarks.

Browsing has become a popular manner in which to access information, also known as "content data." Browsing may comprise Internet browsing that allows remote access to content data remotely using a browser, or Intranet browsing available, for example, within many corporations to access intra-company web pages. Browsing essentials include a computing device having a browser for accessing and manipulating content data and a display for displaying accessed content data.

The Internet includes a plurality of sites that may be accessed during browsing. Each site is a collection of files, documents, and graphics that is generally available to others through the site's connection to the Internet. Each site has a unique Internet Protocol (IP) address. In order to make access to sites more user friendly, a Universal Resource Locator (hereinafter URL), may be used in the address location of a browser. A user wishing to access a particular site must type in the URL at the address location on the browser. Once entered, the browser sends a request through the Internet, receives the content data for the site, and displays the content data to the user.

Another way to access sites is to use a "hyperlink." A hyperlink is a text phrase or graphic that represents, and may conceal a URL. When a user clicks on a hyperlink, they are automatically directed to the site corresponding to that address. The browser automatically goes to the site represented by the hyperlink

- 5 by using the hyperlink URL, without the user having to manually type in the hyperlink URL in the address location of the browser.

The browser also allows a user to bookmark URL's. The bookmark may be the text of the actual URL or may be a text description provided by the user to represent the URL. By way of example, for the URL "www.ericsson.com," the

- 10 bookmark may either be the actual URL "www.ericsson.com" or a text message selected by the user or embedded within the URL web site, such as "Ericsson Home Page." The next time the user desires to go to www.ericsson.com. The user simply goes to the bookmark that represents www.ericsson.com.

- Bookmarking saves time since the user does not have to manually type in the
- 15 URL in the address location of the browser.

A user may have numerous bookmarks stored in their browser. It may become difficult for the user to remember which sites are bookmarked. Additionally, a URL or site description listed in the user's bookmarks may be out of context for the user, difficult for the user to remember why it is bookmarked, or

- 20 void of any significance when viewed by the user.

#### SUMMARY OF THE INVENTION

The present invention is directed to a system and method of assisting a computer user on using and utilizing their browser bookmarks. The present

invention assists users in remembering which sites have been bookmarked, and providing additional information on sites related to bookmarks. This assistance allows the user to save time, obtain better search results and information, and access the information in a more straightforward manner.

5       The invention indicates if a URL placed by the user in the address location of the browser is already stored as a bookmark. If the URL is already stored as a bookmark, the browser sets an indicator to inform the user.

      The invention may also indicate if any hyperlinks contained on an accessed page displayed by the browser are also stored as bookmarks. The browser scans 10 a web page to compare hyperlinks to stored bookmarks. If any hyperlinks are stored as bookmarks, the browser sets an indicator to inform the user.

      A list of related sites may also be compiled to further assist the user in obtaining information about the site and its context. When a browser displays a web page, it searches the hyperlinks in the web page to determine if any 15 hyperlinks are also stored as bookmarks. If so, the browser stores the current URL that contains the hyperlink so that the browser builds a collection of URL that can access the bookmarked hyperlink. This builds a repository of information containing related information about the bookmark. Additionally, the invention may perform searches using the text representations of URL stored in the 20 bookmarks to find additional information about the topic. The search results may then be displayed to the user.

      Duplicate applications of the same site may also be avoided. Prior to accessing and loading another site, the present invention searches other open applications and determines whether the new request is actually a duplicate of an

already open application. If it is a duplicate, the existing application is displayed and the second requested application of the same site is deleted.

#### BRIEF DESCRIPTION OF THE DRAWINGS

- 5       Figure 1 is a prior art schematic diagram of a browser page;
- Figure 2 is a flowchart diagram illustrating the steps of a first embodiment  
of the present invention;
- Figure 3 is a schematic diagram of a web browser illustrating a web site  
having indicators of a bookmark according to one embodiment of the present  
10      invention;
- Figure 4 is a flowchart diagram of the steps of performing another  
embodiment of the present invention;
- Figure 5 is a schematic diagram of a web browser illustrating a web site  
having indicators of a hyperlink that is saved as a bookmark;
- 15      Figure 6 is a flowchart diagram of the steps of performing one embodiment  
of the present invention;
- Figure 7 is a schematic diagram of a web browser illustrating a web site  
having drop down windows displaying bookmarks, alternative accessed sites, and  
search results in accordance with the present invention;
- 20      Figure 8 is a schematic diagram of a web browser illustrating a web site  
having a minimized application of a second website; and
- Figure 9 is a schematic diagram of one use of the present invention within  
a cellular phone containing a browser.

### DETAILED DESCRIPTION OF THE INVENTION

Figure 1 illustrates a prior art web page, generally illustrated 20, accessed by a user using a browser 30. Browser 30 is software running on a computer system that interprets content data accessed from either a local or remote source, 5 and displays the content data in a browser window 31. Web page 20 may be content data from a site remote from the browser, such as an Internet site, or may be content data from a site local to the browser without having to perform a remote access. Browser 30 allows the user to access various websites and to have more than one website application open at a given time. Browser 30 10 includes toolbar 32 and tool icons 34 for accessing and manipulating the various websites that are visited, as well as other additional local commands such as printing.

Browser 30 also provides the ability for the user to establish bookmarks 40 for websites 20. Bookmarks 40 are a stored list of sites that a user has previously 15 stored for convenient access. A bookmark 40 is a textual description of a URL that represents an actual URL. This textual description may be selected by the user or automatically created by browser 30 when the user selects a particular URL to be included in the bookmarks 40. Bookmark 40 may be the same as the actual URL if a representative textual description is not provided by the user 20 and/or web page. By way of example, a bookmark for www.ericsson.com may be listed in bookmarks as either "www.ericsson.com" or "Ericsson Home Page."

A listing of the bookmarks 40 may be accessed by the user in a variety of manners provided by the browser 30, such as via the toolbar 32. Figure 1 also illustrates a pull-down menu 45 that is displayed to the user listing each of the

- individual bookmarks 40 that have been saved. A menu prompt may also be displayed to allow the user to either enter new sites, or to delete sites that are no longer frequented. Related bookmarks 40 may additionally be grouped together in folders under common subject matter or other classification system as
- 5 established by the user. The user highlights the desired bookmark 40, and enters the bookmark to access the corresponding website 20.

Browser 30 further includes an address box 36 for the user to input a website address. The URL is displayed such that the user may view the address concurrently with the website 20. This allows the user to ensure the proper 10 website 20 is displayed, and also assists the user in remembering the URL.

Each website 20 includes a collection of files, documents, and graphics that another party has made generally available to others. Hyperlinks 22 may also be included within the website for users to access other sites. A hyperlink 22 is a text phrase or graphic that conceals the address of another website 20. When the 15 user clicks on the hyperlink 22, they are directed to the site 20 corresponding to that address.

Figures 2 and 3 illustrate one aspect of the present invention in which a URL input by the user has already been saved as a bookmark 40. The method starts (step 200) as bookmarks 40 have been previously established and saved by 20 the user. The user then inputs a URL into the address box 36 to view a particular website 20 of interest (step 202). The input URL is then compared with the bookmarks 40 that are currently saved to determine whether there is a match (decision 204). If the input URL is not matched, the request is processed in the normal manner and the site addressed by the URL input into the address box 36

is accessed and displayed to the user (step 206). If the input URL is matched with an already existing bookmark 40, an indicator 50 is sent to the user to inform them of the match (step 210). The process then proceeds normally (step 206) with the website being displayed and the process ends (step 212).

- 5       The indicator 50 is a notification tool for gaining the user's attention such that they recognize that the URL is already bookmarked and future access to the particular website 20 may be easily obtained by using the bookmark 40.
- Indicators 50 may have a variety of formats such as those illustrated in Figure 2 including, but not limited to displaying the URL in reverse video 50a, displaying 10 icons 50b at some location on the display, displaying a message indicating the existence of the bookmark 50c, an audio alert, blinking the URL for a period of time, or other. Reverse video 50a comprises displaying at least a portion of the display in an inverted background and foreground. By way of example as illustrated in Figure 2, the URL is normally displayed in dark characters on a light-colored background. Reverse video 50a illustrates the URL in light-colored 15 characters with a dark background. One skilled in the art will understand that there are a variety of effective indication methods that may be used and are to be considered within the scope of the present invention. Additionally, a drop down menu of the bookmarks 40 may be displayed illustrating the user the location of 20 the bookmark such that it may be accessed for subsequent access to the website 20. Additionally, this feature of browser 40 providing indicator 50 to user may be user programmable. The user may be able to provide a setting for this feature in user preferences (not shown) contained in browser 40.

Figures 4 and 5 illustrate another embodiment of the present invention in which the user desires to know the context of a bookmark 40. When the user accesses a website 20, each of the hyperlinks 22 are compared with the bookmarks 40 to determine if there is a match between the hyperlinks 22 and 5 bookmarks 40. An indicator 50 is displayed when one or more of the hyperlinks 22 match a bookmark 40.

Figure 4 illustrates the logic of this method. The method starts (step 400) with the user having previously defined bookmarks 40. The user then inputs a URL in the address box 36 and the corresponding website 20 is displayed (step 10 402). The URL may be typed into the address box 36, selects a bookmark 40, accesses a hyperlink 22, or otherwise accesses a website 20. The browser 30 searches the website 20 and the hyperlinks 22 are compared with the bookmarked sites 40 (decision 404). If none of the hyperlinks 22 match the bookmarked sites, the method proceeds normally with the website 20 being 15 normally displayed (step 406). If any of the hyperlinks 22 match the bookmarks 22, an indicator 50 is displayed to the user (step 410) to get their attention and recognize the context in which the bookmarked site is referenced. The indicator 50 may remain on the display for a predetermined period or may remain the entire 20 time the website 20 is being viewed prior to ending (step 412).

The embodiment is illustrated in Figure 5 with an indicator 50 demonstrating to the user that the hyperlink "technology" is saved as a bookmark 40. Just as previously described, indicators 50 include reverse video 50a, and icons 50b, and may also include various others as previously described but not illustrated in this illustration. Additionally, the location of the saved bookmark 40

may be demonstrated to the user to reinforce the location the next time the website is to be visited.

Figures 6 and 7 illustrate another embodiment of the present invention to accumulate a list associated with each bookmark 40 of each accessed website 20 containing a hyperlink 22 to the bookmark 40. Referring specifically to Figure 6, the process starts with previously defined bookmarks 40 (step 600). A website 20 is accessed, such as by inputting a URL into the address box 36, entering another bookmark 40, or inputting a hyperlink 22 from another website 20 (step 602). Once the website 20 is loaded and displayed, each hyperlink 22 listed on the website 20 is accessed (step 604). The hyperlink 22 is then compared with each of the previously saved bookmarks 40 (decision 606). If the hyperlink 22 matches a bookmark 40, the website 20 at which the hyperlink 22 is located is associated with the bookmark 40 (step 610). If the hyperlink 22 does not match a bookmark 40, the next link 22 is checked until all the hyperlinks 22 have been compared (decision 612) and the process ends (step 614).

The results of this process are illustrated in Figure 7. Website 20 illustrated is that associated by the URL ericsson.com entered in the address box 36. A pulldown bookmark menu 42 illustrates the bookmarks 40 that have been saved by the user, one of which is "ERICA 2000 AWARDS." When this bookmark 40 is highlighted, a second pull-down menu 62 contains a list of other sites 63 which contain hyperlinks 22 to the ERICA 2000 AWARDS site. The second pull-down menu 62 may be located in browser 30, and may be associated and/or located proximate to pull-down bookmark menu 42. The other sites 63 may be listed as the actual URL, or may be a description of the site which is furnished by the

website owner, or the user. The website 20 displayed in Figure 7 contains a hyperlink 22 to "ERICA 2000 AWARDS" as indicated at 99. Because this hyperlink 22 is contained on the Ericsson homepage, it is indicated in the pull-down menu 62 as another site from which the ERICA 2000 AWARDS may be accessed. The pull-down menu 62 assists the user in recognizing the contexts in which the bookmark 40 may be encountered.

Figure 7 also illustrates another aspect of the present invention of using the bookmarks 40 to search for additional websites 20 that contain related information. When the user selects a bookmark 40, browser 30 performs a search for other websites 20 that are related to the bookmark. The results of the search may be displayed to the user, such as in a pull-down menu 70. The search results 72 again may include the actual URL or may a description of the website. The search results 72 may be permanently stored and affiliated with the bookmark 40, or they may be deleted and another search performed during a subsequent encounter.

One example of performing this search is as follows. Assume a user has a bookmark titled "ERICA 2000 AWARD" with the corresponding URL of http://www.2000.au/groups/dcc.html. Further, assume this website 40 may also be accessed by the URL http://www.award.net/index.html which has not been bookmarked by the user. Further assume that http://www.award.net/index.html contains the following code:

```
<html>
<body>
this is a list of awards:
25 <OL><LI><a href ="http://www.2000.au/groups/dcc.html">ERICA 2000
Awards</a>
<LI>
```

--  
--  
</OL>  
</body>  
5 </html>

When the user selects the "ERICA 2000 AWARDS" bookmark 40 to visit in the browser 30, a search will be performed that will indicate that the bookmark 40 is also referenced at <http://www.award.net/index.html>. The user can use this knowledge to know more about the award, and at the same time does not have to perform an exhaustive search in the event that more information is necessary.

10 The user can also be presented the option of saving the search so that a subsequent search is not required to revisit the original bookmark 40 searched. However, the user may desire to perform a new search on a bookmark 40 to

15 update the search results indicating all current web sites that reference bookmark 40.

The method may further be expanded to search all hits found. A first level search is performed for other websites that contain hyperlinks 22 back to the bookmarked site. A second level search would then be performed for other

20 websites 20 that contain hyperlinks 22 to the first level sites and also contain a hyperlink to the bookmarked site. These second level sites may be referred in a list, such as a pull-down menu 70 or the like that is accessible to the user.

The present invention also allows the user to know how many other websites 20 contain hyperlinks 22 to a specific site 20. The ramifications of any

25 change in the URL may be considered by the user prior to making any changes. One example of when this information may be useful is a user who owns their own website and changes the URL associated with a website. By way of example,

assume a user has a home website 20 with the address  
http://colportal.com/usera.html. The user places her resume under the site  
http://colportal.com/usera/resume.html. Sometime later, the user decides to move  
her resume to http://colportal.com/usera/resumeofusera.html. By using the

5. present invention, the user is informed of how many other websites reference the site that contains her resume and whether she should leave the resume at that site, or at least provide a notice that her resume has moved to another site.

Another aspect of the present invention is illustrated in Figure 8 and prevents redundant applications of the same website 20 from being opened at a given time. When a user inputs a URL and requests that the associated site by opened, a search is made of the other loaded websites 20. If a loaded site having the same URL is already open, it will be displayed to the user without a second application being opened.

Figure 8 illustrates two currently loaded websites, ericsson.com, which is currently displayed as website 20 and indicated at location 83, and cellularphones.com which is loaded and has been minimized. The user has just input another URL (cellularphones.com) into the address box 36 which normally contains the URL of the active website illustrated in 20. When the user enters the requested URL, the present invention will check the other loaded applications.  
Upon finding that another application of cellularphones.com is already open, this website will be displayed in website 20 without opening a redundant application of cellularphones.com. This redundancy checking feature may be user programmable. Browser 40 may have this option included in its user preference

section, so that the user can set whether or not two or more browsers 40 can access the same URL.

- The present invention may be used in a variety of computing devices. A "computer device" is defined herein as any data processing device including 5 microprocessors, conventional personal computers, personal digital assistants, mobile terminals or phones, and the like. The term is meant to be construed broadly. One example is a mobile terminal 89 illustrated in Figure 9. Further, "mobile terminal" is also defined to include mobile phones, personal digital assistants, two-way pagers, and the like. Thus, the various terms may overlap.
- 10 A user may use a computing device to access the Internet, such as through an Internet Service Provider, such as BELLSOUTH.NET™, GTE.NET™, or the like. Specifically contemplated would be accessing the World Wide Web with a web browser.

- Another embodiment features Internet capable mobile terminals, such as 15 those presently being marketed by most of the major cellular phone manufacturers such as ERICSSON. These mobile terminals and the conventional technology associated therewith allow voice and data messages to be routed through the Internet as well as use the mobile terminals to view Internet based material. All of these forms of communication are possible and contemplated as 20 being used to facilitate the present invention.

While the Internet is contemplated as the primary network by which websites are accessed, other networks, proprietary or public could equivalently be substituted. Additionally, there are numerous networks, both satellite-based and terrestrial that may be combined to create such a network.

The present invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention. Many of the examples and illustrations describe and show a single embodiment. However, two or more applications of the invention may be used in

5 a single device. By way of example, a wireless communication device having a browser may allow for indicators to be displayed when a bookmarked site is inputted into the address box 36, and may also display other websites that include a hyperlink 22 to the bookmarked site. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes

10 coming within the meaning and equivalency range of the appended claims are intended to be embraced therein.

What is claimed is:

1. A method of indicating an already bookmarked site entered by a user on a browser, the method comprising the steps of:
  - receiving a request from the user to access a website having a URL;
  - 5 comparing the URL with bookmarked sites in a browser; and
  - sending an indicator to the user if the URL is contained in the bookmarked sites in the browser.
2. The method of claim 1, further comprising the step of indicating to the user  
10 where the bookmarked site is stored.
3. The method of claim 1, wherein the indicator is selected from the group consisting essentially of illustrating the URL in reverse video, blinking the URL, displaying an icon, displaying a pop-up window, and sending an audio signal to  
15 the user.
4. The method of claim 1, wherein said step of sending an indicator is user programmable.
- 20 5. A method of indicating that a hyperlink is saved as a bookmark, the method comprising the steps of:
  - displaying a site that comprises at least one hyperlink;
  - comparing each of the at least one hyperlinks to a list of previously  
saved bookmarks; and

sending an indicator to the user corresponding to each of the hyperlinks that are saved as a bookmark.

6. The method of claim 5, further comprising the step of indicating to the user  
5 where the bookmarked site is stored.
7. The method of claim 5, wherein the indicator is selected from the group consisting essentially of illustrating the hyperlink that matches a bookmarked site in reverse video, blinking the hyperlink, displaying an icon, displaying a  
10 pop-up window, and sending an audio signal to the user.
8. The method of claim 5, wherein the step of sending the indicator to the user corresponding to each of the hyperlinks that are saved as the bookmark comprises highlighting the hyperlinks at a position where they are located on  
15 the site.
9. The method of claim 5, wherein said step of sending an indicator is user programmable.
- 20 10. A method of compiling alternative access to a bookmark, the method comprising the steps of:  
saving at least one site as a bookmark;  
accessing a second site and displaying the second site to a user, the second site containing at least one hyperlink;

comparing each of the at least one hyperlinks with the at least one bookmark; and

saving the second site when the hyperlink matches one of the bookmarks.

5

11. The method of claim 10, further comprising affiliating the matching hyperlink with the corresponding matching bookmark.

12. The method of claim 10, wherein the step of saving the second site when one  
10 of the hyperlinks matches one of the bookmarks comprises saving the site as a  
URL.

13. The method of claim 10, wherein the step of saving the second site when one  
of the hyperlinks matches one of the bookmarks comprises prompting the user  
15 to enter a title under which the second site will be saved.

14. The method of claim 10, wherein the steps of comparing each of the at least  
one hyperlink with the at least one bookmark and saving the second site when  
one of the hyperlinks matches one of the bookmarks are automatically  
20 performed for each site accessed by the user.

15. The method of claim 10, further comprising the step of displaying each of the  
saved sites associated with the bookmark when the user highlights the  
bookmark.

16. The method of claim 10, wherein said step of comparing is user programmable.

5 17. A method of searching the text of a bookmark, the method comprising the steps of:

accessing a bookmark;

performing a search using a text representation of said bookmark;

comparing said text representation to other web sites; and

10 saving said other web sites if said text representation is referenced in said other web sites;

18. The method of claim 17, further comprising the step of displaying said other web sites after said step of comparing is completed.

15

19. The method of claim 17, wherein said step of comparing is user programmable.

20. A method of reducing the number of loaded applications on a user's computer,  
20 the method comprising the steps of:

receiving a first request to load a first site having a first URL in the computer;

loading the first site and displaying its contents;

thereafter, receiving a second request to load a second site having a second URL in the computer; and

comparing the first and second URLs and, when the URLs match,  
displaying the contents already loaded from the first request to prevent  
duplicate applications from being loaded onto the computer.

5    21. The method of claim 20, wherein the step of receiving the second request to  
load the second site having the second URL in the computer comprises  
selecting a bookmarked site.

10    22. The method of claim 20, wherein the step of receiving the first request to load  
the first site having the first URL in the computer comprises selecting a  
bookmarked site.

23. The method of claim 20, wherein said step of comparing is user  
programmable.

15

24. A browser, comprising:

an address box containing an active URL;  
at least one bookmark, each of said at least one bookmark representing  
20    a web site;  
an indicator corresponding to said active URL to notify a user if said  
active URL is contained in one of said bookmarks.

25. The browser of claim 24, wherein said indicator is selected from the group consisting essentially of illustrating the URL in reverse video, blinking the URL, displaying an icon, displaying a pop-up window, and sending an audio signal to the user.

5

26. A browser, comprising:

an address box containing an active URL;  
a web site of said active URL containing at least one hyperlink;  
at least one bookmark within said web site;  
10 an indicator corresponding to said hyperlink when said hyperlink corresponds to at least one of said bookmarks.

27. The browser of claim 26, wherein said indicator is selected from the group consisting essentially of illustrating the URL in reverse video, blinking the URL, 15 displaying an icon, displaying a pop-up window, and sending an audio signal to the user.

28. The apparatus of claim 26, wherein a plurality of indicators are displayed on said website.

20 29. A browser, comprising:

a bookmark menu containing at least one bookmark; and  
a second menu associated with each of said at least one bookmark,  
said second menu comprising a list for said bookmark identifying at least one web site having a hyperlink referencing said bookmark.

30. The browser of claim 29, wherein said bookmark menu is a pull-down menu.

31. The browser of claim 29, further comprising:

5            a third pull down menu associated with each of said at least one  
bookmark and containing additional web sites that reference said at least one  
bookmark.

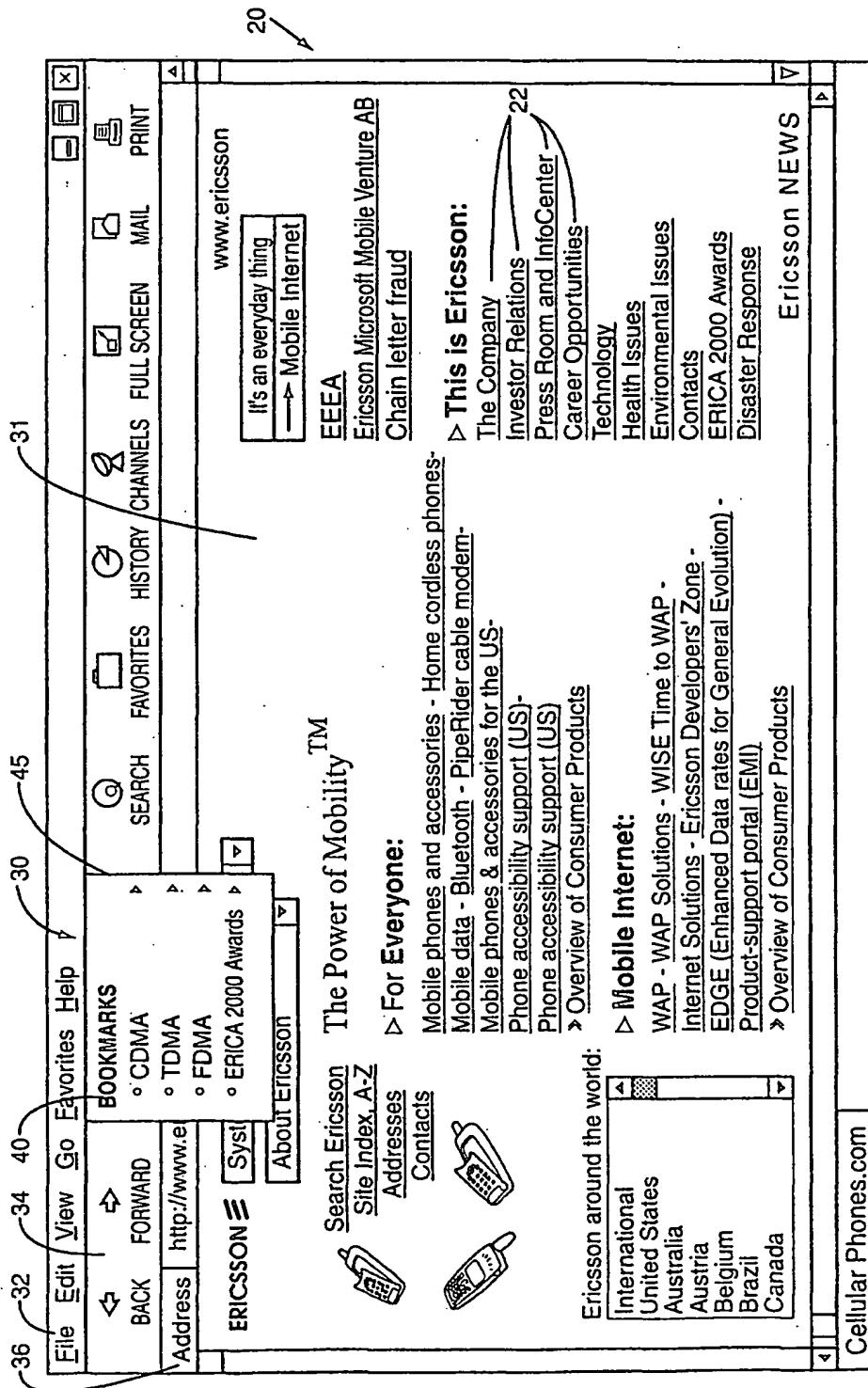


FIG. 1  
(PRIOR ART)

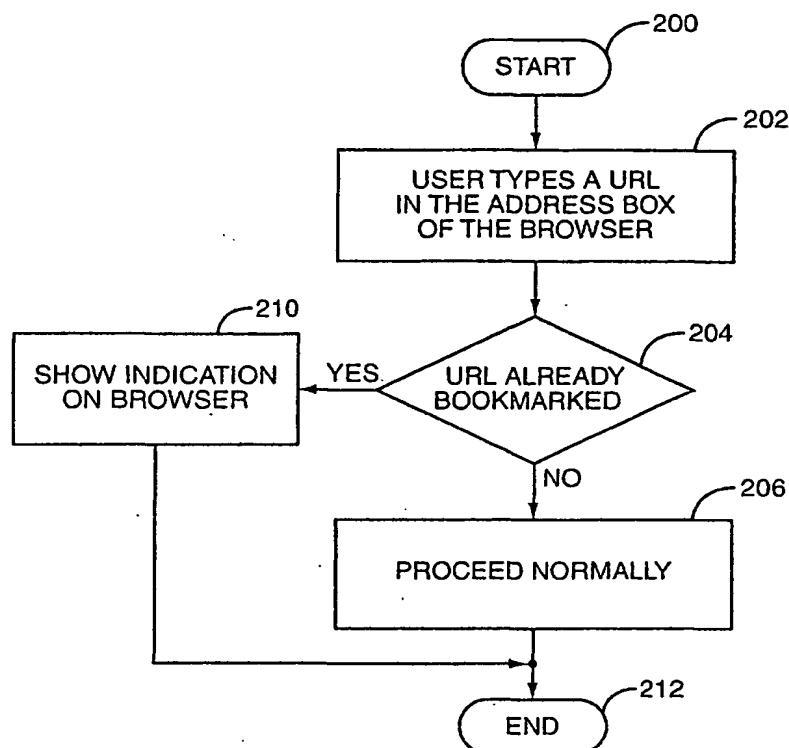


FIG. 2

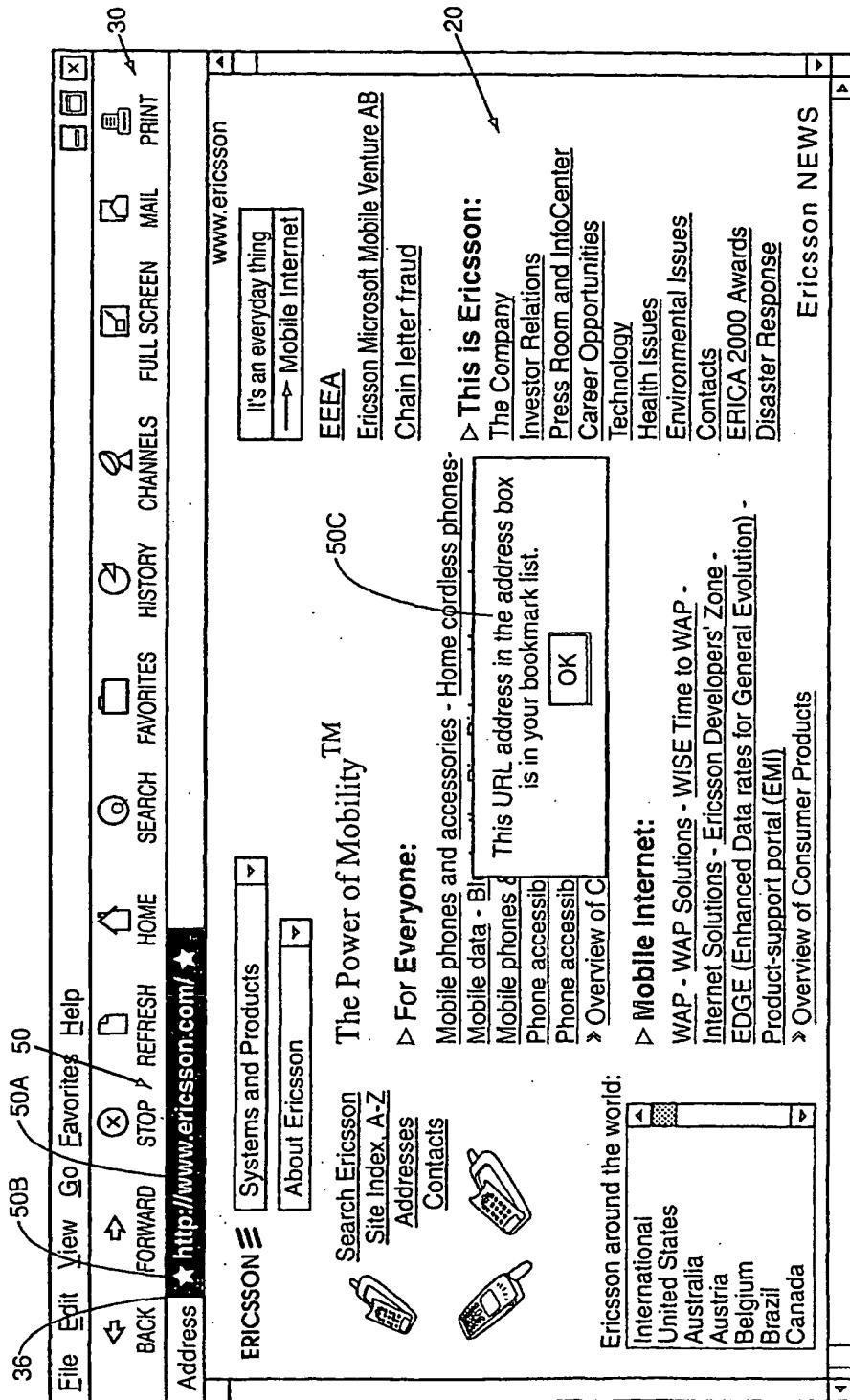


FIG. 3

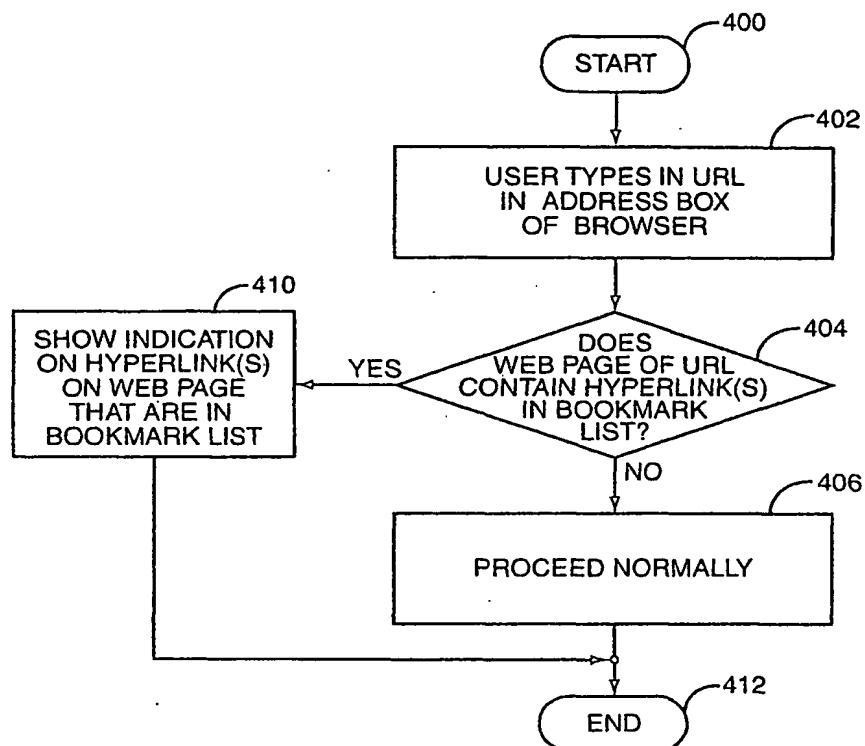
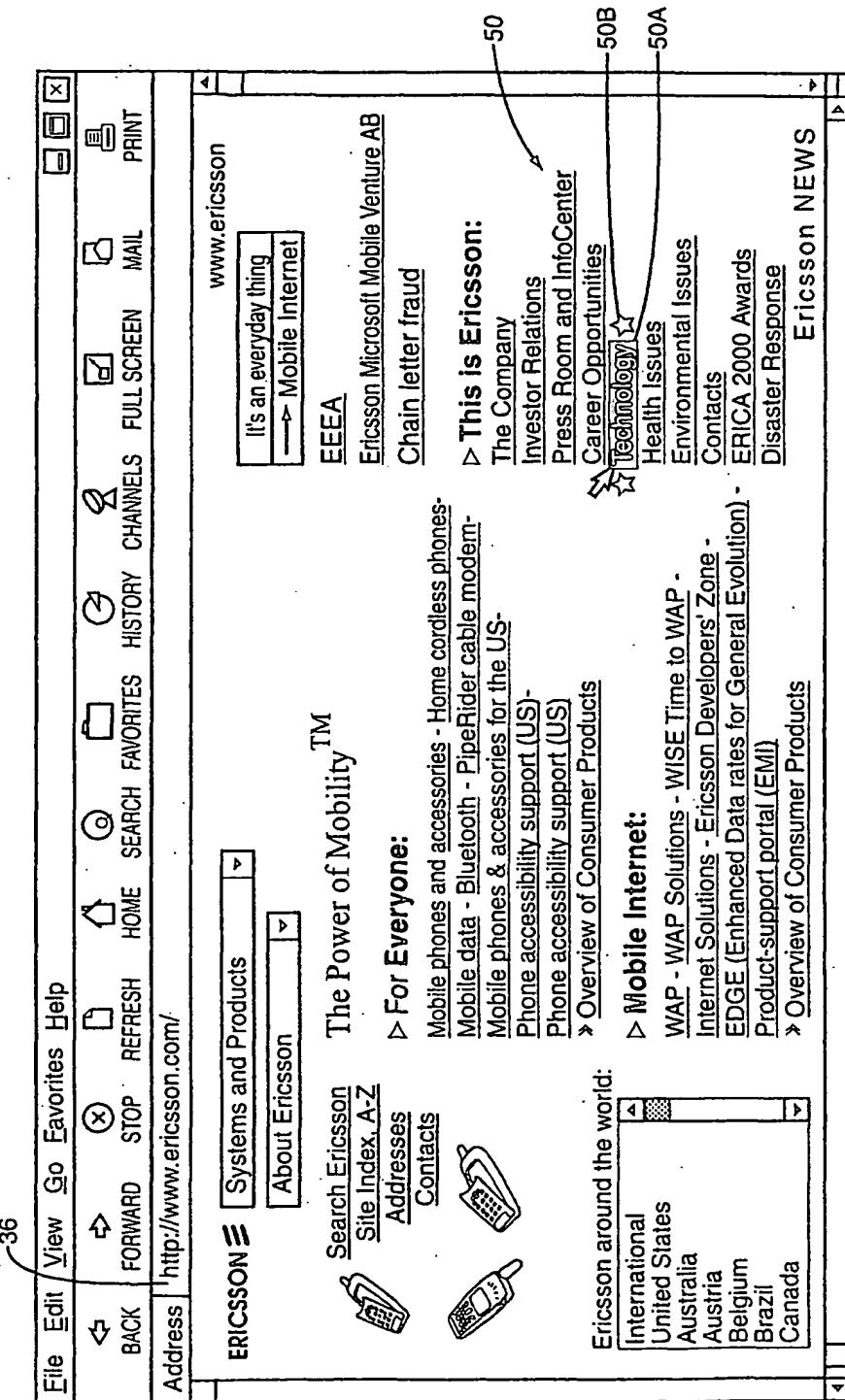


FIG. 4



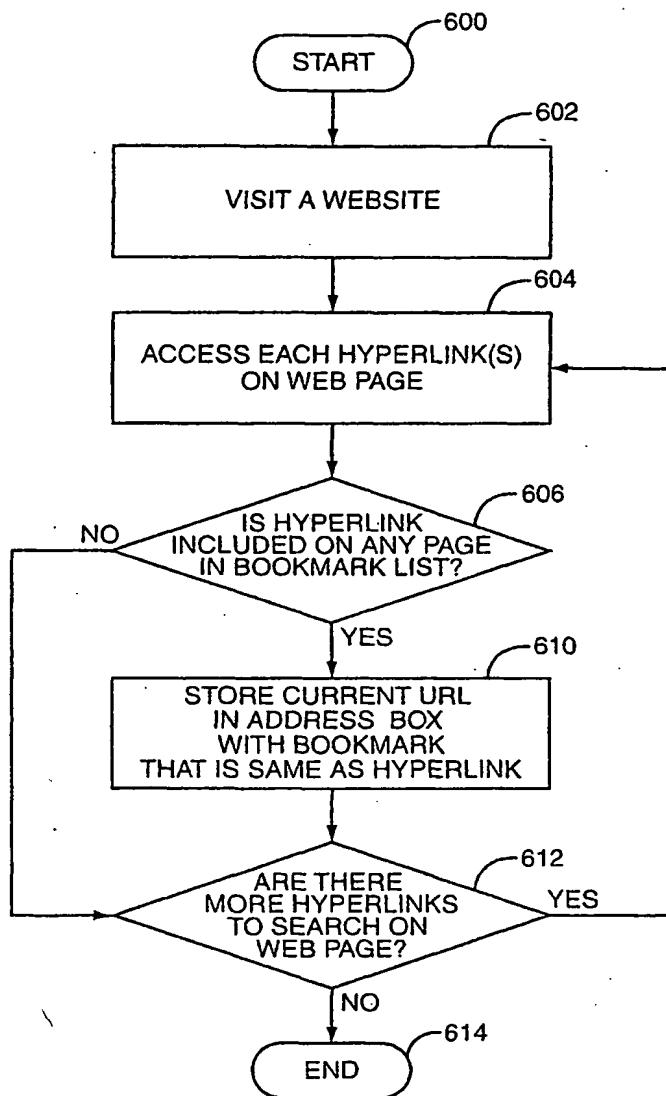


FIG. 6

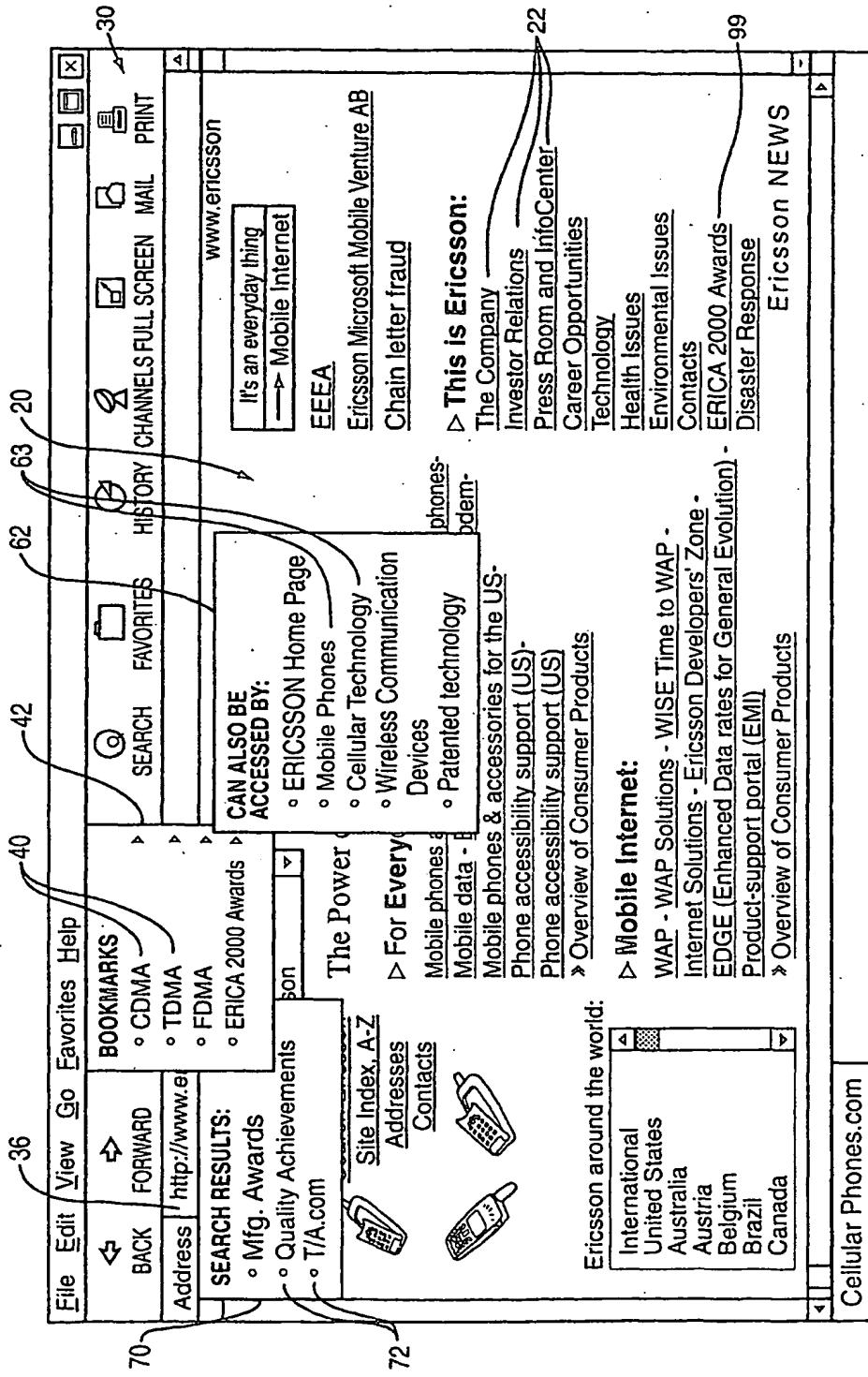


FIG. 7

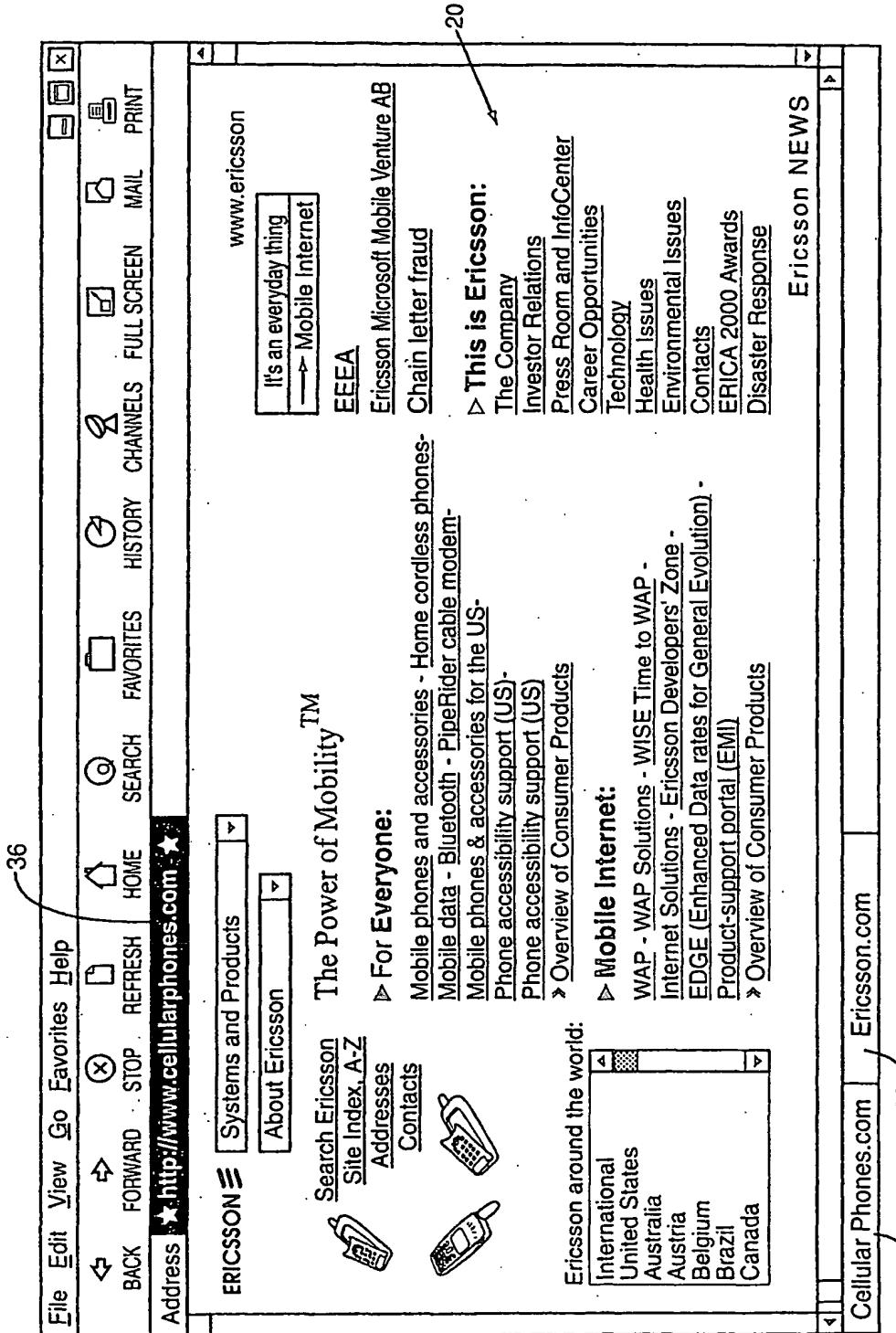


FIG. 8

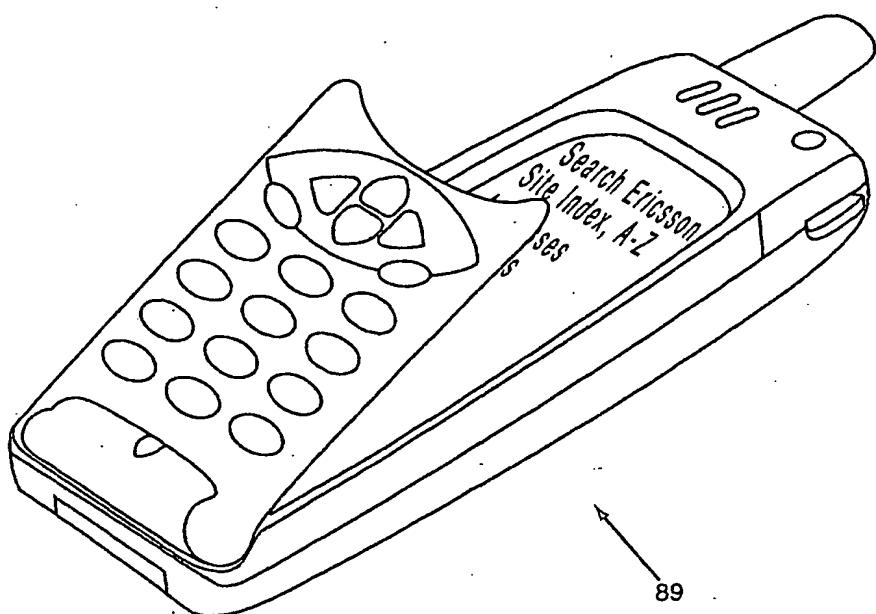


FIG. 9